

# SEMANTIC HELP: STATUS, RESEARCH OBJECTIVES, FIRST IMPLEMENTATION STEPS

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## 1. Aim of the Workshop

The aim of the workshop is to draft a roadmap to Semantic Help by bringing together the leading scientists of the fields of ontologies, active portals and life situations as well as process orchestration:

1. to summarise the status of research and practical experience,
2. to discuss actual questions, existing obstacles and possible first implementation steps of a Semantic Help System, and
3. to identify further research challenges and objectives.

Semantic Help should improve the public service for clients, citizens and businesses. The central idea of Semantic Help is to support people by discovering their specific life situation, which usually consists of a conglomerate of different services required. Semantic Help provides a context sensitive and complete guide to the range of public services offered. It improves service localization for the users by producing individual check-lists, offering an individually configured meta-process for the orchestration of different services, or fostering Web 2.0 dynamics through which users can (partially) redesign a website according to their individual needs. Intelligent event-driven software agents can support users by guiding them through difficult procedures and by autonomous completing of incomplete data or offering pre-filled forms. Different user interfaces like avatars, sign language or just WAI conform web-interfaces are feasible.

The workshop contributions will address:

1. Upstream configuration of knowledge design to construct a user-relevant semantic help tool.
2. Semantic Web principles and its consequences for an adaptive systems architecture, knowledge modelling and system design and maintenance.
3. Maintaining the complexity of contextual information and knowledge based support system in an environment that requires adaptivity due to changing regulations and client demands.
4. Semantic annotation and argument visualisation in content-rich electronic participation systems.

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5. A business process ontological framework aimed at supporting the development of correct business processes and the execution of correct instances.
6. Typical problems with process orchestration for customer-centric service provisioning.
7. Algorithms to enable automatic combination of (business) processes for automatically enabled (business) process interaction.

It is an additional aim of the workshop to provide compact information of the above mentioned topics, such as Semantic Help and process orchestration and ontologies in the field of knowledge and process modelling for the audience. On the other hand the audience is invited to bring in individual knowledge and ideas for discussion.

## **2. Workshop organization**

First all participants give a short presentation, describing their status quo and their vision. A general discussion is held after each presentation. In a subsequent panel discussion the participants try to elaborate a consolidated position concerning status of research, existing obstacles, further research objectives and possible first implementation steps. Of course dissenting opinions are possible. As a last step the results are discussed with the audience.

It is intended by the organisers to produce a documentation of the results, which should be published in an appropriate manner, e.g. as a book. Details will be appointed together with the workshop participants.

## **3. Participants**

- Stefanie Betz, University of Karlsruhe, Institute AIFB, Germany. "Automatic decomposition of (business) processes"
- Yannis Charalabidis, School of Electrical & Computer Engineering, Athens, Greece. "Semantic Annotation and Argument Visualisation in Content-Rich Electronic Participation Systems"
- Tom van Engers, University of Amsterdam, Leibniz Center for Law, Amsterdam, The Netherlands. "Principles of Exchanging Legal Knowledge"
- Olivier Glassey, Université de Lausanne Switzerland. "Upstream knowledge design configurations to construct a user-relevant semantic help tool"
- Marijn Janssen, Delft University of Technology, Faculty of Technology, Policy and Management, The Netherlands. "Research in Process Orchestration for Semantic Help"
- Michele Missikoff, Italian national Research Council, Italy. "An ontology-based method for Business Process anomalies detection and correction"
- Pierre Rossel, Ecole polytechnique fédérale de Lausanne, Switzerland. "Upstream knowledge design configurations to construct a user-relevant semantic help tool"